

## PATENT APPLICATION o

Attorney Docket: 11927/46002 A

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of: RIESS et al

Group Art Unit: Not assigned

Application No.: Not assigned

Examiner: Not assigned

Filed: July 9, 2001

For: RELIABLE SYMBOLS AS A MEANS OF IMPROVING THE

PERFORMANCE OF INFORMATION TRANSMISSION SYSTEMS

## INFORMATION DISCLOSURE STATEMENT

Director of the U.S. Patent and Trademark Office Washington, D.C. 20231

Sir:

Pursuant to 37 CFR § 1.56, the attention of the Patent and Trademark Office is hereby directed to the reference(s) listed on the attached PTO-1449. Unless otherwise indicated herein, one copy of each reference is attached. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the reference(s) be made of record therein and appear among the "References Cited" on any patent to issue therefrom. The paragraphs marked below are applicable.

	1.	This Information Disclosure Statement is being filed (a) within three
mont	hs of the	e U.S. filing date or the date of filing a CPA, OR (b) before the mailing date
of a f	irst Offic	ce Action on the merits in the present application. No certification or fee is
requi	red.	

	2.	This Information Disclosure Statement is being filed with a Request t	for
Conti	nued E	amination (RCE). No certification or fee is required.	

	3.	This Information Disclosure Statement is being filed more than three
		the U.S. filing date AND after the mailing date of the first Office Action on
the n	nerits, b	ut before the mailing date of a Final Rejection or Notice of Allowance.

<b>∃</b> a.	I hereby certify that each item of information contained in this
nformation	Disclosure Statement was cited in a communication from a foreign
patent office	in a counterpart foreign application not more than three months prior
	of this Information Disclosure Statement. 37 CFR §1.97(e)(1).

Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 CFR §1.97(e)(2).
c. Please debit Deposit Account No. <a href="https://doi.org/11-0600">11-0600</a> in the amount of \$240.00 in payment of the fee under 37 CFR §1.17(p) to ensure consideration of the disclosed information. Two duplicate copies of this paper are attached.
☐ 4. This Information Disclosure Statement is being filed more than three months after the U.S. filing date and after the mailing date of a Final Rejection or Notice of Allowance, but before payment of the Issue Fee. Applicant(s) hereby petition(s) that the Information Disclosure Statement be considered. Please debit Deposit Account No. 11-0600 in the amount of \$130.00 in payment of the petition fee under 37 CFR §1.17(i)(1) to ensure consideration of the disclosed information. Two duplicate copies of this paper are attached.
a. I hereby certify that each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 CFR §1.97(e)(1).
□ b. I hereby certify that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 CFR §1.97(e)(2).
OPTIONAL INSERT PARAGRAPHS FOR INFORMATION DISCLOSURE STATEMENT (Please delete non-applicable paragraphs).
☐ 5. Relevance of the non-English language reference(s) is discussed in the present specification.
☐ 6. The reference(s) was/were cited in a counterpart foreign application. An English language version of the foreign search report is attached for the Examiner's information.
☐ 7. A concise explanation of the relevance of the non-English language reference(s) appears in the Appendix attached hereto.
☐ 8. The Examiner's attention is directed to co-pending U.S. Patent Application No, filed, which is directed to related technical subject matter. The identification of this U.S. Patent Application is not to be construed as a waiver of

secrecy as to that application now or upon issuance of the present application as a patent. The Examiner is respectfully requested to consider the cited application and the art cited therein during examination of the present application.						
9. This application is one of a series of related applications, identified in the attached Appendix, which are directed to related technical subject matter. The identification of those U.S. Patent Applications is not to be construed as a waiver of secrecy as to those applications now or upon issuance of the present application as a patent. The Examiner is respectfully requested to consider the cited applications and the art cited therein during the examination.						
10. The reference(s) was/were cited by or submitted to the Office in parent application No, filed, which is relied upon for an earlier filing date under 35 U.S.C. §120. Thus, copies of these references are not attached. 37 CFF §1.98(d).						
☐ 11. English-language Abstracts of the non-English language references are attached hereto.						
☐ 12. Other.						
Respectfully submitted,						
KENYON & KENYON						
Date: July 9, 2001  Robert L. Hails, Jr./ Registration No. 39,702						

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Substitute	for form 1449A/PTC	)			Complete if Known			
				Application Number	Not assigned			
INFO	RMATION D	ISC	LOSURE	Filing Date	July 9, 2001			
STAT	<b>EMENT BY</b>	<b>API</b>	PLICANT	First Named Inventor	RIESS et al			
				Group Art Unit	Not assigned			
	(use as many she	ets as	necessary)	Examiner Name	Not assigned			
Sheet	1	of	2	Attorney Docket Number	11927/46002			

U.S. PATENT DOCUMENTS							
Examiner	<b>!</b>	U.S. Paten	t Document	Name of Patentee or Applicant	Date of Publication of Cited Document		
Initials *	Cite No.1	Number	Kind Code <sup>2</sup> (if known)	of Cited Document	MM-DD-YYYY	<u>.</u>	
		4,847,797		PICCHI et al	7/11/89		
		5,214,675		MUELLER et al	5/25/93		
		5,444,712		BETTS et al	8/22/95		
		5,533,050		ISARD et al	7/2/96		
		5,541,964		COHEN et al	7/30/96		
	l l	5,550,924		HELF et al	8/27/96		
	Ī i	5,694,423		LARSSON et al	12/2/97		
	1	5,793,807		WERNER et al	8/11/98		
		5,809,074		WERNER et al	9/15/98		
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		5,835,731		WERNER et al	11/10/98		
		5,867,539		KOSLOV	2/2/99		
		5,940,440		WERNER et al	8/17/99		
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	FOREIGN PATENT DOCUMENTS								
F	0:4-	Foreign Patent Document			Name of Patentee	Date of Publication of	Pages, Columns, Lines, Where Relevant		
Examiner Initials*	Cite No. <sup>1</sup>	Office <sup>3</sup>	Number⁴	Kind Code <sup>5</sup> ( <i>if known</i> )	or Applicant of Cited Document	Cited Document MM-DD-YYYY	Passages or Relevant Figures Appear	T <sub>6</sub>	
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Examiner Signature	Date Considered	

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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. 2 See attached Kinds of U.S. Patent Documents. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 6 Applicant is to place a check mark hee if English language Translation is attached.

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Substitute for form 1449A/PTO Complete if Known **Application Number** Not assigned INFORMATION DISCLOSURE Filing Date July 9, 2001 STATEMENT BY APPLICANT First Named Inventor RIESS et al Group Art Unit Not assigned (use as many sheets as necessary) **Examiner Name** Not assigned 11927/46002 of 2 Attorney Docket Number Sheet

	_	OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS	$\overline{}$
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
•		Kwon et al, "A Blind Equalization with the Variable Decision Region", Pers. Indoor and Mobile R. Comm., vol. 2, pp 322-326 (Sept. 1997)	
		Lee et al, "A Decision-Directed Blind Equalization with the Error Variance Estimation", vol. 1, pp 99-103, IEEE, (Oct. 1997)	
		Lee et al, "Convergence Analysis of the Stop-and-Go Blind Equalization Algorithm", IEEE Trans. Comm., vol. 47, no. 2, pp 177-180, (Feb. 1999)	
		Xu et al, "An Improved Decision-Directed Equalization Algorithm for MQAM Modulation", Chinese Journal of Electronics, vol. 9, pp 45-51 (1997)	
		Xu et al, "New Decision-Directed Equalization Algorithm for QAM Communication Systems", IEEE Global Telecommunications Conference 1996, vol. 2, pp 1330-1334, (1996)	
		Werner et al, "Blind Equalization for Broadband Access", IEEE Comm., vol. 37, no. 4, pp 87-93, (April 1999)	
<u>.</u> .		Lee et al, "Joint Blind Equalization with a Shell Partition-Based CMA for QAM Signal Constellations", IEEE Int'l. Conference on Acoustics, Speech, and Signal Processing, IEEE Computer Society Press, pp 2513-2516, (April 21-24, 1997)	
		Tseng et al, "A Stop-and-Go Dual-Mode Algorithm for Blind Equalization", Globecom 96, vol. 2, pp 1427-1431, (November 18-22, 2996)	
		Garth et al, "Blind Equalization Algorithms with Automatic Constellation Phase Recovery for Dual-Mode CAP-QAM Reception", 1999 IEEE Int'l. Conference on Communications, vol. 3, pp 1531-1536, (June 6-10, 1999)	
		Axford et al, "A Dual-Mode Algorithm for Blind Equalization of QAM Signals: CADAMA", 29th Asilomar Conference on Signals, Systems & Computers, vol. 1, pp 172-176, (October 30 - November 1, 1995)	
		Weerackody et al, "Dual-Mode Type Algorithms for Blind Equalization", <i>IEEE Transactions on Communications</i> , Vol. 42, no. 1, pp 22-28, (January 1994)	

Examiner	Date	
Signature	Considered	
Olgitature	001.0.00.00	

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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<sup>&</sup>lt;sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.